## Message

From: Jonathan Sterne [Jonathan.Sterne@bristol.ac.uk]

**Sent**: 4/3/2019 10:20:59 AM

To: Thayer, Kris [thayer.kris@epa.gov]; Julian Higgins [Julian.Higgins@bristol.ac.uk]

Subject: RE: Article in Science about PM and CASAC

Attachments: Review of IRIS.pdf

## Thanks Kris – very interesting. That Cox article

(https://www.tandfonline.com/doi/full/10.1080/10408444.2017.1311838) – illustrates the problem. It says "The few papers that explicitly attempt to model causality rely on unverified modeling assumptions, casting doubt on their predictions about effects of interventions." I would say that all attempts to make causal inferences from observational data rely on unverifiable assumptions – we are simply trying to make clear what these are and do our best to estimate (and critique estimates of) causal effects based on these assumptions. We are absolutely not saying that studies are worthless just because they make assumptions. Saying that implies you're only interested in evidence from trials, which would be absurd.

Miguel told me about the attached review of IRIS, which says a lot about wanting risk of bias assessments to be included in IRIS systematic reviews. Was that part of your brief for your current job?

Best

Jonathan

--

Jonathan Sterne
Professor of Medical Statistics and Epidemiology
Department of Population Health Sciences
Bristol Medical School
University of Bristol
Oakfield House
Oakfield Grove
Bristol
BS8 2BN
UK

Tel: 0117 331 0021 (internal 10021) Email: jonathan.sterne@bristol.ac.uk

Executive Assistant: Kerry Barot / Angharad Davies

Tel: 0117 33 14599 Email: pa-brc@bristol.ac.uk

www.bristol.ac.uk/social-community-medicine

Twitter: @jonathanasterne

From: Thayer, Kris <thayer.kris@epa.gov>

Sent: 22 March 2019 08:12

To: Julian Higgins < Julian. Higgins@bristol.ac.uk>; Jonathan Sterne < Jonathan. Sterne@bristol.ac.uk>

Subject: FW: Article in Science about PM and CASAC

Some context for angst at evaluating against target experiment